its eight sections provided the structure for teachers to alternate left-mode, theoretical concepts with right-mode, concrete, real-life applications. For example, a math teacher who had previously used only left-mode instructional techniques involving lecture, workbook problems, and tests was able to take ideas offered by an English teacher to design creative interactive activities with manipulatives, visuals, and role-playing, all of which allowed students to practice and apply the math concepts he wanted to teach. To his great delight, he discovered that student interest and motivation were high and that they learned the concepts quicker and retained them longer.

And how have other Tech Prep teachers responded to our training efforts? Listen to the words of one of our team members:

As an English teacher, I am used to working by myself. I get ideas from other English teachers, but what I teach and how I teach has been pretty much my own preference. With Tech Prep, we were encouraged to work together—the science, math, and English teachers all sharing what we might teach in a normal year. Taking the two learning styles inventories made it easier to understand and talk about our individual differences as learners and teachers, as well as to prepare lesson plans. 4MAT became the basis for a working relationship for those of us in different subject areas—something that is difficult for high school teachers. The 4MAT Model has made collaboration possible. 4MAT works!

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LYNN S. KELLEY

Using 4MAT to Improve Staff Development, Curriculum Assessment, and Planning

4MAT can help schools structure their staff development efforts and manage the integration of innovations in curriculum and instruction.

How could the Littleton, Colorado, Public School District continue to meet the challenge of change and improve its own excellence? We were proud of our long, successful history of staff development and instructional improvement efforts—95 percent of our teaching administrative staff participated in ITIP (Instructional Theory Into Practice) classes and cadres during a period of rapid change from 1982 until 1986—and we were searching for a follow-up program.

When we began looking at the next steps to professional growth, we sent seven of our Horizons staff development members to an I/D/E/A conference in Monterey, California, to hear Bernice McCarthy and her staff talk about 4MAT learning styles. Little did we know that this pleasant, exciting experience would not only grow into a major staff development program, but would also have a marked effect on our curriculum and assessment projects.

After the conference, three of the explorers taught a class on learning styles to a group of our peers (easy for a Quadrant Four learner but harder for the Quadrant Two and Quadrant Three learners.) The other four conference-goers taught a site-based staff development program at Franklin Elementary School. We learned a lot from the experiences and proceeded to offer the class for both college and re-certification credit over the next three years. More than 400 of our 900 teachers and administrators have voluntarily taken the course for one semester hour of credit, and many have taken
the second course as well. They now use the 4MAT lesson design process routinely.

This may not seem a particularly outstanding accomplishment for a district using one of the current, highly effective staff development programs and innovations. But the exceptional thing about our program is its great number of spin-off offerings and applications. For example, teachers are using this approach to dramatically restructure our curriculum through our Curriculum Evaluation Process (CEP).

For the past two years, members of the CEP Steering Committee have taken the learning styles course to help ground their thinking in the changing needs of our students and to develop new ways to meet those needs. Our curriculum is based on research on learning styles and the brain and associated philosophical assumptions about the varied ways that students learn.

Our long-range 4MAT project focuses on ways to assess student learning that go beyond standardized achievement scores and allow students to demonstrate their achievement in a broad continuum. By offering workshops to help teachers rethink the ways they assess student knowledge, we have helped them expand their repertoire of testing, evaluating, and grading students to both honor and challenge the style preferences of each individual. While we have just begun our action-based research in this area, we believe our base of learning styles knowledge will enable us to make a major paradigm shift in assessment that will yield important benefits.

Another application of our 4MAT process has been an attempt by some of our restructuring committees to create inservice opportunities for teachers to develop a vision of what elementary education might become. Centennial Elementary has combined the 4MAT process with CBAM (the Concerns Based Adoption Model) to help teachers plan and implement their vision of the future for students. They "4MATted" each staff meeting and inservice, to the delight of both staff and parents. The changes they proposed were substantial, and they believe the use of 4MAT was key to their acceptance.

We will continue to broaden our knowledge of curriculum assessment and planning through the use of the 4MAT system. Now we are ready to add other innovations such as cooperative learning and TESA, which are natural complements to 4MAT. Thus, we believe we have found a basic staff development structure in 4MAT which allows us to meet the challenges of change. 4MAT is a system which honors creativity and diversity and helps us to manage the complexities of the ever-increasing innovations of curriculum and instruction.

Author's note: Laura Dieter, Linda Hoople, Ginger Riffel, and Barbara DeSpain are all trainers in the Littleton Public Schools staff development program. The author acknowledges their contributions to the Littleton Public Schools and to this article.

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